



Docket No.: YOR919990159US1

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## Patent Application

Applicant(s): Bolle et al.  
Docket No.: YOR919990159US1  
Serial No.: 09/290,645  
Filing Date: April 12, 1999  
Group: 2134  
Examiner: Matthew Smithers

Title: System and Method for Liveness Authentication Using an Augmented Challenge/Response Scheme

AFFIDAVIT UNDER 37 C.F.R. §1.131

I, the undersigned, hereby declare and state as follows:

1. I am one of the named inventors of the invention described and claimed in the above-referenced U.S. patent application.

2. On October 30, 1998, a meeting was set up through an electronic mail (email) with Louis J. Percello, an attorney handling the drafting of the above-referenced U.S. patent application. The email was from Nalini Ratha to Louis J. Percello. As indicated in the email, the meeting was to discuss invention disclosure YOR8-1998-0524 and was set for November 2, 1998. The email was also copied to me (Jonathan H. Connell) and Rudolf (Ruud) M. Bolle. A copy of the email evidencing these facts is attached hereto as Exhibit A.

3. Invention disclosure YOR8-1998-0524 formed the basis for the above-referenced U.S. patent application.

✓ 4. On November 17, 1998, Nalini Ratha sent a document entitled "YO898-0524\_Nalini\_11-2-98.lwp" to Louis J. Percello. A copy of an email evidencing this fact is attached hereto as Exhibit B. The document entitled "YO898-0524\_Nalini\_11-2-98.lwp" was a revised version of the invention disclosure YOR8-1998-0524.

✓ 5. On February 19, 1999, Nalini Ratha sent a document entitled "YO898-0524\_Nalini\_11-2-98.lwp" to Louis J. Percello. A copy of an email evidencing this fact is attached hereto as Exhibit C.

✓ 6. On March 25, 1999, Nalini Ratha sent a document entitled "YO898-0524 Nalini 3-23-99.lwp" to Louis J. Percello. A copy of an email evidencing this fact is attached hereto as Exhibit D. The document entitled "YO898-0524 Nalini 3-23-99.lwp" was a revised version of the invention disclosure YOR8-1998-0524.

Docket No.: YOR919990159US1

✓ 7. On March 26, 1999, Louis J. Percello sent a document entitled "YO898-0524 Nalini 3-27-99.lwp" to Nalini Ratha. A copy of an email evidencing this fact is attached hereto as Exhibit E. The document entitled "YO898-0524 Nalini 3-27-99.lwp" was a revised version of the invention disclosure YOR8-1998-0524.

✓ 8. On March 26, 1999, Nalini Ratha sent a document entitled "YO898-0524 Nalini 3-27-99.lwp" to Louis J. Percello. A copy of an email evidencing this fact is attached hereto as Exhibit F. The document entitled "YO898-0524 Nalini 3-27-99.lwp" was a revised version of the invention disclosure YOR8-1998-0524.

✓ 9. On April 7, 1999, Nalini Ratha sent an email to Louis J. Percello. This email indicates that Nalini Ratha previously faxed Louis J. Percello revised figures for the invention disclosure YOR8-1998-0524 and that Ruud M. Bolle previously sent revisions of the invention disclosure YOR8-1998-0524 to Louis J. Percello. A copy of this email is attached hereto as Exhibit G.

10. On April 12, 1999, an application based on the invention disclosure YOR8-1998-0524 and its revisions was filed with the U.S. Patent Office.

11. All statements made herein of my own knowledge are true, and all statements made on information and belief are believed to be true.

12. I understand that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and may jeopardize the validity of the application or any patent issuing thereon.

Date: 10/23/03

  
Jonathan H. Connell

Exhibit A-page 1



Nalini Ratha  
10/30/1998 09:48 AM

To: Louis J Percello/Watson/IBM  
cc: Jonathan Connell/Watson/IBM@IBMUS, Ruud M  
Bolle/Watson/IBM@IBMUS  
Subject: Re: begin writeup

Lou,

Let's meet on Monday 3-5 PM in my office (H1-K10).

The disclosure numbers are: YOR8-1998-0520

YOR8-1998-0523

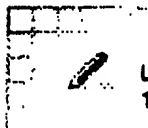
YOR8-1998-0524 ✓

YOR8-1998-0531

If time permits, we might go into some of my old disclosures.

Thanks,

Nalini

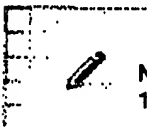


Louis J Percello  
10/29/98 12:02 PM

To: Nalini Ratha/Watson/IBM@IBMUS  
cc:  
From: Louis J Percello/Watson/IBM @ IBMUS  
Subject: Re: begin writeup

I'm free, 11/2/98, 3-5 PM. Where would you like to meet? Here is more convenient for me but I could come to Hawthorne. Do you have your disclosure number handy?

\*\*\*\*\*  
Lou Percello, Sr. IP Law Attorney  
IBM T.J. Watson Research Center  
Voice (TL 862) 914-945-3145  
Fax (TL 862) 914-945-3281  
Internet addr: Percello@us.ibm.com  
\*\*\*\*\*



Nalini Ratha  
10/29/98 09:13 AM

To: Louis J Percello/Watson/IBM  
cc:  
From:  
Subject: Re: begin writeup

Lou,

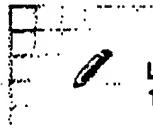
Jon and I are free Monday 3-5PM. Please let me know if it is OK with you.

Thanks,

(2) page 1

Exhibit A - page 2

Nalini



Louis J. Percello  
10/23/98 03:02 PM

To: Nalini Ratha/Watson/IBM@IBMUS  
cc:  
From: Louis J Percello/Watson/IBM @ IBMUS  
Subject: Re: begin writeup [E]

I'm open 10am-5pm, monday 11/2, and thursday and friday (11/5-6). Also tuesday 3-5 pm. Pick a 2 hour slot. Can you come here?

\*\*\*\*\*  
Lou Percello, Sr. IP Law Attorney  
IBM T.J. Watson Research Center  
Voice (TL 862) 914-945-3145  
Fax (TL 862) 914-945-3281  
Internet addr: Percello@us.ibm.com  
\*\*\*\*\*

Nalini Ratha

10/22/98 04:50 PM

To: Louis J Percello/Watson/IBM  
cc: Jonathan Connell/Watson/IBM@IBMUS  
From:  
Subject: begin writeup

Lou,

Could we meet sometime during the first week of Nov. to start the process of writing for the disclosures? Jon prefers afternoons. Please let us know.

Thanks,

Nalini

(2) page 2

Exhibit B



Nalini Ratha

11/17/1998 05:04 PM

To: Louis J Percello/Watson/IBM, Jonathan Connell/Watson/IBM@IBMUS

cc:

Subject:



YO898-0524\_Nalini\_11-2-98.lm

4

1/3/1999

Exhibit C



Nalini Ratha

02/19/1999 11:38 AM

To: Louis J Percello/Watson/IBM

CC:

Subject: draft

Lou,

I didn't come to Yorktown because of a customer demo here. But I sent you the patent application writeup and the figures by internal mail. I am enclosing the Wordpro file of the writeup. Ruud would be back on Monday.

Regards,

Nalini



YO898-0524\_Nalini\_11-2-98.lw

Exhibit D



Nalini Ratha

03/25/1999 06:54 PM

To: Louis J Percello/Watson/IBM  
cc: Ruud M Bolle/Watson/IBM@IBMUS, Jonathan  
Connell/Watson/IBM@IBMUS  
Subject: Re: -524

Lou,

Here is the revised version of 524. Please let us know if we have to provide any more details.

Regards,

Nalini



YO898-0524 Nalini 3-23-99.lwp

Exhibit E



Louis J Percello  
03/26/1999 05:49 PM

To: Nalini Ratha/Watson/IBM@IBMUS, Barbara  
Rasa/Watson/IBM@IBMUS  
cc: Ruud M Bolle/Watson/IBM@IBMUS, Jonathan  
Connell/Watson/IBM@IBMUS  
Subject: Re: -524

See comments in pink. Let's think about business method claims. do by phone.



YO898-0524\_Nalini\_3-27-99.lv

B,

Please docket. PPM 600, rate 2, pvt 37.

\*\*\*\*\*

Lou Percello, Sr. IP Law Attorney  
IBM T.J. Watson Research Center  
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Fax (TL 862) 914-945-3281  
Internet addr: Percello@us.ibm.com  
\*\*\*\*\*

Nalini Ratha

03/25/99 06:54 PM

To: Louis J Percello/Watson/IBM  
cc: Ruud M Bolle/Watson/IBM@IBMUS, Jonathan Connell/Watson/IBM@IBMUS  
From: Nalini Ratha/Watson/IBM@IBMUS  
Subject: Re: -524

Lou,

Here is the revised version of 524. Please let us know if we have to provide any more details.

Regards,

Nalini



YO898-0524\_Nalini\_3-23-99.lwp



Exhibit F



Nalini Ratha

03/26/1999 06:46 PM

To: Louis J Percello/Watson/IBM

cc: Ruud M Bolle/Watson/IBM@IBMUS, Jonathan  
Connell/Watson/IBM@IBMUS

Subject: -524

Lou,

Jon and I answered most of your questions in the revised draft enclosed herewith. I am sending you fig. 6 and 7 revisions. Thanks for pointing out the fig. 7 missing description, we included that.

Regards,

Nalini



YO898-0524\_Nalini\_3-27-99.lwp

(8)

Exhibit G



Nalini Ratha

04/07/1999 03:44 PM

To: Louis J Percello/Watson/IBM

cc:

Subject: old -524

Lou,

Hope you received the revised figures I faxed you and the revisions to the writeup Ruud sent you. Are the revisions sufficient? Please let us know if we need to work any further on it.

Regards,

Nalini